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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,513	01/03/2001	Jun-Ho Sung	P56268	9980

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EXAMINER	
KANG, PAUL H	

ART UNIT	PAPER NUMBER
2141	

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/752,513	SUNG ET AL.	
	Examiner	Art Unit	
	Paul H. Kang	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 August 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 June 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

In view of the appeal brief filed on August 24, 2005, PROSECUTION IS HEREBY REOPENED. During review of the appeal brief, typographical errors were found in the previous rejection. In order to correct these errors and to allow applicants an opportunity to respond to the new grounds of rejection, a NON-FINAL office action is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

Claim Rejections - 35 U. S. C. § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-24 are rejected under 3 5 U. S. C. 103 (a) as being unpatentable over Jansen et al. (US 6,243,450), further in view of Massarani (US 6,393,484), and further in view of Hoguta et al. (US 6,725,303).

3. As per claim 1, Jansen teaches an internet interface server system (Col. 4, lines 29-36), comprising an internet network for providing high-speed connection services (Col. 4, lines 29-36: T1 connections is high-speed service), plural interface units for connecting terminals of users (Figure 2, item 38: A plurality of terminals are connected to the Central server, through the intranet, through their Ethernet interfaces) to the internet network (Figure 2, item 40) so as to provide the users with internet services (Col. 1, lines 60-63; Col. 4, lines 29-36), a central management server connected to the internet network (Figure 2: "Central Server") and responsive to the input into the interface units of settlement information (Col. 2, lines 21-23: A payment receiver such as a card reader), relating to the mobile terminals for carrying out usage authentications of the mobile terminals by performing data communications with an external settlement server which carries out settlements upon reception of the settlement information from the interface units (Figure 2; Col. 4, lines 10-14: Vendor servers include payment authorization servers), and for transmitting charge information with respect to the internet connection services of the mobile terminals (Col. 5, lines 4-11).

However, Jansen does not explicitly teach a central management server allocating dynamic IP addresses and enabling the mobile terminals to carry out internet searches and the central management server being responsive to the mobile terminals receiving from the interface units a signal terminating the internet connections for releasing the dynamic IP addresses allocated to the mobile terminals.

Massarani teaches mobile and dynamic end user devices connected to a shared-medium network through an access port, connected to a router/switch. The router/switch is connected to a Dynamic Host Control Protocol (DHCP) server that assigns TCP/IP configuration

information such as IP address, to the end user device (Col. 4, lines 32-67). Massarani further teaches releasing the dynamic IP address allocated to the mobile terminal once a lease is expired or the terminal is disconnected from the access port (Col. 6, lines 66-67; Col. 7, lines 1-33).

By allowing the system of Jansen to dynamically allocate IP addresses for the mobile terminals, such as the system of Massarani, the system of Jansen would be able to release resources that the terminals aren't using so free them up.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Massarani in the system of Jansen-Gupta, because by implementing the specification as described above, the system would prevent unauthorized persons from taking advantage of the exposed network access ports to gain IP connectivity to the network (Massarani: Col. 1, lines 27-30).

Jansen-Massarani does not explicitly teach the terminals being mobile terminals. Jansen-Massarani does disclose that the terminals may be mobile terminals, however does not disclose details of the implementation (Col. 3, lines 31-37; Col. 1, line 54: Terminals can be wirelessly located anywhere and therefore are considered mobile, and various services can be provided to terminal users).

In the same field of endeavor, Hoguta teaches a system and method wherein users may access high-speed network connections while mobile (i.e. hotel rooms. Hoguta, col. 3, lines 21-60).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated the mobile terminals as taught by Hoguta into the system of Jansen-Massarani for the purpose of enabling remote high-speed network connections to mobile devices.

4. As per claim 2, Jansen-Massarani-Hoguta teach the claimed invention as described above and further teaches wherein the mobile terminals are at least one of notebook computers, palm top computers, network computers and PDAs (Jansen: Col. 3, lines 31-35; Massarani: Col. 4, lines 31-34).

5. As per claim 3, Jansen-Massarani-Hoguta teach the claimed invention as described above and further teaches wherein each of the interface units comprise a first communication unit connected to the mobile units (Jansen: Figure 4, Item 104: The Ethernet Interface connects to the mobile units and to the Intranet),

a second communication unit connected to the internet network for performing communications with the central management server (Jansen: Figure 3, items 46, 48, & 50: The terminals are connected to the central server through the interface which connects them to the web server, file server, and transaction server), via the internet network (Jansen: Figure 3, item 64), for transmitting a mobile terminal-requested signal to the internet network (Jansen: Figure 3, item 68), and for enabling each of the interface units to receive a signal comprising information searched in the internet network (Jansen: Figure 3, item 68),

a storage unit for storing at least one of communication port activation data for the interface units (Jansen: Figure 4, item 212: "Configuration file"), settlement information (Jansen: Figure 4, item 116: "Card Data Buffer"), encryption data (Jansen: Figure 4, item 116; Col. 5, lines 1-11: "Card Data Buffer:" The card data would be encrypted inside the terminal to prevent unauthorized use), and deciphering data (Jansen: Figure 4, item 112, "Received Message Buffer" holds card data which can be decoded), and for storing operating programs for carrying out input and output (Jansen: Figure 4, item 168: "Web Browser Program" has input and output functionality), with respect to usage information of the mobile terminals (Jansen: Figure 4, item 160: "Billing Program"),

a settlement unit responsive (Jansen: Figure 3, item 70), to user input of settlement information into the mobile terminals in order to settle charges for the use of the interface units of the mobile terminals for reading (Hoguta, col. 2, line 22 – col. 3, line 25;; Jansen: Figure 4, item 30: "Card reader") and transmitting the settlement information from the mobile terminals of the user (Hoguta, col. 2, line 22 – col. 3, line 25; Jansen: Figure 4, item 88),

an output unit responsive to connection of the mobile terminals to the interface units, input of the settlement information by the user (Hoguta, col. 2, line 22 – col. 3, line 25; Jansen: Figure 4, item 30: "Card reader"), approval of the settlement information by the central management server (Jansen: Figure 3, item 70), conduct of work through the internet network and termination of the conducted work, for outputting a statement of usage charges with respect to the usage times of the mobile terminals (Hoguta, col. 2, line 22 – col. 3, line 25; Jansen: Figure 6, item 260; Col. 10, lines 23-33),

a liquid crystal display (LCD) (Jansen: Figure 4, item 92) for displaying the statement outputted by the output unit for visual confirmation of the users, and for performing a function as a user interface for the users (Jansen: Figure 3, item 68: "Requests"),

a control unit responsive to connection of the mobile terminals to the first communication unit for activating communication channels for the mobile terminals (Hoguta, col. 3, lines 21-60; Jansen: Figure 4, item 82: "gyp"), for transmitting to the external settlement server the settlement information of the users (Jansen: Figure 3, items 50 and 70: "Transaction server"), and responsive to an approval signal for receiving the dynamic IP addresses from the central management server for allocation to the mobile terminals (Massarani: Figure 4, item 410 & 414: If a MAC address is registered, it is approved and an appropriate IP address is allocated), for storing in the storage unit charge information with respect to the connections of the mobile terminals (Jansen: Figure 3, item 62: Database keeps track of the billing records and usage rates), for outputting the charge information from the storage unit to the output unit and the liquid crystal display while (Jansen: Figure 6, item 260; Col. 10, lines 23-33), at the

same time, transmitting the charge information the central management server (Jansen: Figure 3, item 70: "Billings"), and the settlement server through the second communication unit when the connections of the mobile terminals and their internet interface units are terminated (Figure 12, item 266 and 268: User quits service), and for transmitting to the central management server a signal releasing the allocated dynamic IP addresses (Massarani: Col. 6, lines 66-67; Col. 7, lines 1-33).

6. As per claim 4, Jansen-Massarani-Hoguta teach the claimed invention as described above and further teaches a local area network (LAN) cable for connection between the first communication unit and the mobile terminals (Massarani: Col. 4, lines 36-43; Col. 5, lines 26-54).

7. As per claim 5, Jansen-Massarani-Hoguta teach the claimed invention as described above and further teaches wherein the LAN cable is connected to a LAN card mounted in the mobile terminals (Massarani: Col. 4, lines 47-53).

8. As per claim 6, Jansen-Massarani-Hoguta teach the claimed invention as described above and further teaches wherein the storage unit stores driver information for LAN cards provided in the interface unit (Jansen: Figure 5, item 162; Col. 7, 28-33).

9. As per claim 7, Jansen-Massarani-Hoguta teach the claimed invention as described above and further teaches wherein the storage unit stores programs for performing charge for the mobile terminals (Jansen: Figure 9; Col. 9, lines 53-67).

10. As per claim 8, Jansen-Massarani-Hoguta teach the claimed invention as described above and further teaches wherein the settlement unit is a card reader for reading a credit card (Jansen: Figure 4, item 30; Col. 4, lines 5-19).

11. As per claim 9, Jansen-Massarani-Hoguta teach the claimed invention as described above and further teaches wherein the second communication unit carries out wireless communication (Jansen: Col. 3, lines 31-37).

12. As per claims 11-24, they recite the same claim limitations as in claims 1-9, and therefore are rejected under the same rationale.

13. As per claim 10, Jansen-Massarani-Hoguta teach an internet interface service method, where when a mobile terminal of a user and an internet interface unit are connected by any of a local area network (LAN) cable equipped in a first communication unit and a LAN cable equipped with a LAN card (Jansen, Col. 1, lines 31-37), establishing a communication channel with the mobile terminal by use of a control unit as to activate the first communication unit (Hoguta, col. 3, lines 21-60; Jansen, Col. 1, lines 31-37: A communication line is dedicated specifically to the mobile terminal), the control unit being included in the internet interface unit (Jansen, Figure 4, item 104),

outputting from the control unit a message requesting user entry of settlement information in order to settle charges for the use of the interface unit by the mobile terminal of the user after the establishment of the communication channel (Jansen, Figure 10; Col. 10, lines 1-3), and when the user enters the settlement information, reading the settlement information, transmitting the settlement information to a settlement server through a central management server, and receiving a settlement approval from the settlement server (Jansen,

Figure 3, item 70: "Credit Card Services," "Validations & Billings;" Col. 10, lines 60-67; Col. 11, lines 1-67; Col. 12, lines 1-29),

when a predetermined connection termination signal is inputted to the interface unit by a connection termination menu provided on one of the mobile terminal and the interface unit (Hoguta, col. 3, lines 21-60; Jansen, Figure 12, item 266: "User quits the service"), terminating the communication channel of the mobile terminal by means of the control unit, outputting charge information stored in the storage unit to an output unit (Hoguta, col. 2, line 22 – col. 3, line 25; Jansen: Figure 6, item 260; Col. 10, lines 23-33) and a liquid crystal unit display (LCD) (Figure 4, item 92) while, at the same time, transmitting the charge information by means of the control unit to the central management server and the settlement server through a second communication unit, thereby performing a charging function (Jansen: Figure 3, items 50 and 70: "Transaction server").

receiving a dynamic IP address from the central management server, allocating the received IP address to the mobile terminal, and performing data communications by means of the data terminal according to predetermined work through the internet interface unit and an internet network connected to the internet interface unit (Massarani, Col. 1, lines 31-32: Internet Service Providers provide access to the internet), through an access port, connected to a router/switch. The router/switch is connected to a Dynamic Host Control Protocol (DHCP) server that assigns TCP/IP configuration information such as IP address, to the end user device (Massarani, Col. 4, lines 32-67). Massarani further teaches releasing the dynamic IP address allocated to the mobile terminal once a lease is expired or the terminal is disconnected from the access port (Massarani, Col. 6, lines 66-67; Col. 7, lines I -33).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul H Kang whose telephone number is (571) 272-3882. The examiner can normally be reached on 9 hour flex. First Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paul H. Kang
Primary Examiner